

CLAIMS

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1. A method comprising,
in connection with authenticating a client of a network, acquiring information that
characterizes the client in a manner that enables a determination about authenticating the client of
5 the network, the information being acquired other than in the form of a digital message that is
passed on behalf of the client to the network, and
making an authentication decision based on the information.
 2. The method of claim 1 in which the information is acquired by the network.
 3. The method of claim 1 in which the information comprises a measurable physical property
10 of the client.
 4. The method of claim 3 in which the measurable physical property is sensed from a location
that is remote from the client.
 5. The method of claim 3 in which the measurable physical property comprises a physical
property of a device that is part of the client.
 - 15 6. The method of claim 3 in which the measurable physical property comprises a physical
property of a person associated with the client.
 7. The method of claim 3 in which the information comprises a geographic location of the
client.
 8. The method of claim 7 in which the geographic location is determined by measuring a time
20 of reception at multiple receiving locations of a beacon signal that originates at the client.
 9. The method of claim 8 in which the measurement is done at earth orbiting-satellites.
 10. The method of claim 8 in which the measurement is done at earth-bound receiving towers.
 11. The method of claim 1 in which the information comprises a caller ID delivered by a
telephone service provider.
 - 25 12. The method of claim 1 also including using global positioning system sources to send
messages to the client.
 13. The method of claim 3 in which the client includes a mobile telephone device and the
geographical location is determined by a mobile telephone service provider.
 14. The method of claim 3 in which the measurable physical property includes internal clock
30 phasing of the client relative to a network master clock.

15. The method of claim 1 in which the acquiring of the information is triggered by a request of the client for access to the network.

16. The method of claim 1 also including
controlling access of the client to the network based on the acquired information.

17. The method of claim 16 in which controlling access comprises excluding the client from access if the client has not been authenticated.

18. The method of claim 1 in which the network comprises a closed network and the location of the client is controlled by an operator of the network.

19. The method of claim 1 in which a user of the client is unaware that the information is being acquired.

20. The method of claim 1 also including
sending digitized credentials from the client to the network, and
also basing the authentication decision on the digitized credentials.

21. A method comprising
encrypting information in a manner that is based on a physical property of an intended recipient of the information, and
delivering the encrypted information to the recipient.

22. The method of claim 21 in which the physical property comprises a location of the recipient.

23. The method of claim 21 also including authenticating the recipient.

24. The method of claim 21 also including
decrypting the information on behalf of the recipient based on the physical property.

25. The method of claim 24 in which the decrypting is done automatically by the physical property.

26. The method of claim 21 in which the physical property comprises a sensitivity to light or sound of a user associated with the client.

27. The method of claim 21 in which the physical property of the intended recipient includes properties of DNA associated with the recipient.

28. The method of claim 21 in which the physical property of the intended recipient includes sensitivity of the recipient to light or sound.

29. A method comprising
physically associating a source of a beacon with a person,
measuring times of receipt of the beacon at multiple stations, and
determining the location of the person based on the times of receipt.
- 5 30. The method of claim 29 in which the
times of receipt are measured periodically, and also including
generating a map of the locations determined from the measurements.
31. The method of claim 29 also including
triggering an alert if the location of the person is different from an expected location.
- 10 32. The method of claim 29 also including
performing an authentication process in connection with determining the location of the
person.
33. A method comprising
establishing a set of stations that are configured to acquire information that characterizes
15 each of multiple clients in a manner that enables a determination about authenticating each of the
clients with respect to a corresponding network, the information being acquired other than in the
form of digital messages that are passed on behalf of the clients to the corresponding networks,
and
providing the information to operators of the networks to enable them to make
20 authentication decisions based on the information.
34. A method of encrypting and decrypting a message comprising
expressing the message as a message signal comprised of a sum based on eigenfunctions,
decomposing the sum into partial sums such that each of the partial sums conveys no
meaning relative to the message, partial sums from the sum separating the expressions of the
25 signal into partial summations,
forming electromagnetic signals based on the respective partial sums,
sending the electromagnetic signals from respective sources at times selected to assure the
simultaneous arrival of the signals at an intended location, such that the electromagnetic signals
superpose themselves to form the message signal.